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(54) Speaker adaptation based on eigenvoices

(57) The recognizer tests input utterances using a confidence measure to select words of high recognition confidence for use in the adaptation process. Adaptation is performed rapidly using a priori knowledge of about the class of speakers who will be using the system. This a priori knowledge can be expressed using eigenvoice basis vectors that capture information about the entire targeted user population. The dialogue sys-

tem may also use the confidence measure to output a pronunciation example to the user, based on the confidence that the system has in the results of recognition, given the different possibilities that can be recognized. The dialogue system may also provide voiced prompts that teach the user how to correctly pronounce words.

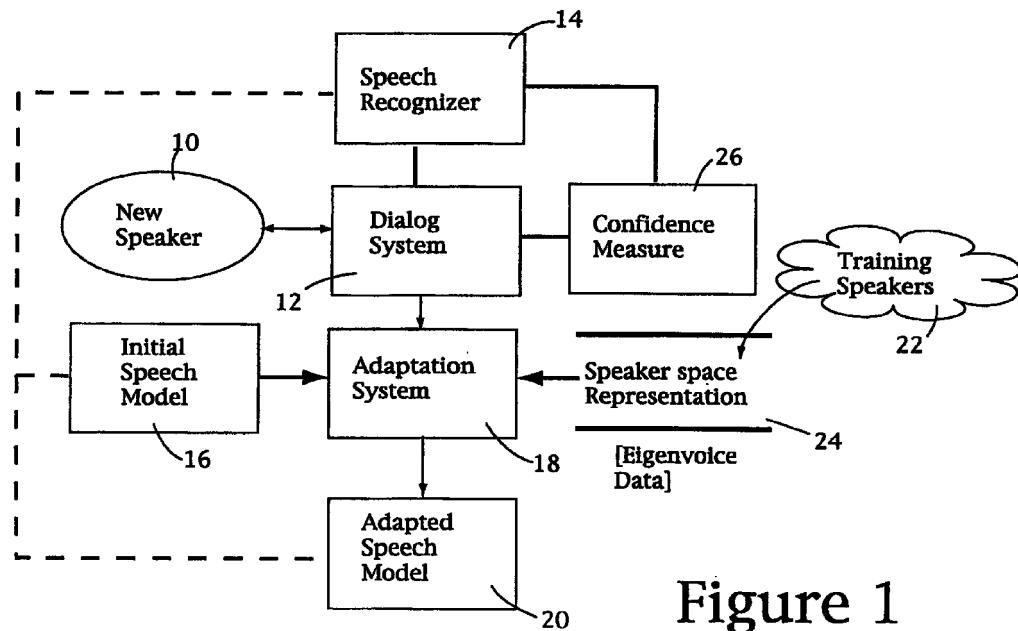


Figure 1



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EUROPEAN SEARCH REPORT

Application Number
EP 00 30 0290

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int.Cl.7)						
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim							
X	US 5 787 394 A (BAHL ET AL) 28 July 1998 (1998-07-28)	1	G10L15/06						
Y	* abstract * * column 2, line 28-45 * * column 2, line 64 – column 3, line 5 * —	2-5							
Y	KUHN ET AL.: "Eigenvoices for speaker adaptation" ICSLP'98, 1998, pages 1771-1774, XP000910944 * the whole document *	2,3							
Y	US 5 717 828 A (ROTHENBERG) 10 February 1998 (1998-02-10) * abstract; figures 2,3 * * column 1, line 54 – column 2, line 17 * * column 5, line 31-44 * * column 6, line 18-26 *	4,5							
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)						
			G10L						
<p>The present search report has been drawn up for all claims</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Place of search</td> <td style="width: 33%;">Date of completion of the search</td> <td style="width: 34%;">Examiner</td> </tr> <tr> <td>THE HAGUE</td> <td>23 June 2000</td> <td>Quélavoine, R</td> </tr> </table>				Place of search	Date of completion of the search	Examiner	THE HAGUE	23 June 2000	Quélavoine, R
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THE HAGUE	23 June 2000	Quélavoine, R							
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document							
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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 00 30 0290

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23-06-2000

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82